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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/059,032	01/30/2002	Masahiko Kamiya	01-253	7626

23400 7590 08/27/2003

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EXAMINER

KRAMER, DEVON C

ART UNIT	PAPER NUMBER
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3683

DATE MAILED: 08/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/059,032

Applicant(s)

KAMIYA ET AL.

Examiner

Devon C Kramer

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 June 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-53 is/are pending in the application.
- 4a) Of the above claim(s) 2-6, 8-13, 16, 19-22, 24-26, 30-46, 49, 50 and 52 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 7, 14, 15, 17, 18, 23, 27-29, 47, 48, 51 and 53 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

- 1) Applicant's election without traverse of sub-species 5 in Paper No. 7 is acknowledged.
- 2) Claims 2-6, 8-13, 16, 19-22, 24-26, 30-46, 49-50 and 52 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species and sub-species, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 5 and 7. Please note that claim 24 was previously stated to be generic, but it is related to species 25 where the master cylinder has a variable diameter. Please note that claim 34 was previously stated to be generic, but is related to species 26 where the amplifying unit has a middle diameter portion.

### ***Specification***

- 3) The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification. Examples of some errors are listed below:

Page 1 line 13, "whit" should be --with--;

Page 13 line 4, "lump" should be --lamp--.

### ***Claim Objections***

- 4) Claims are objected to because of the following informalities:  
Claim 1 line 11, "dispose" should be --disposed--;

Claim 1 line 15, "rated value" should be --a rated value--;

Claim 1 line 22, "port brake" should be --port, brake--;

Claim 1 line 24, "discharge via the discharge port" should be --discharge, via the discharge port,--

Claim 15 line 4, "whose the other end" should be --whose other end--

Applicant's claims seem to be a translation of the Japanese application and contain many grammatical errors, which make the claims difficult to read. Applicant is asked to read through the claims to add commas and punctuation in order for the claims to read more clearly.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

5) The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6) Claims 1, 7, 14-15, 17-18, 23, 27-29, 47-48, 51 and 53 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the brake pedal" in line 21. There is insufficient antecedent basis for this limitation in the claim.

Claims 14, 28 and 34 recites the limitation "the pressurizing flow amount amplifying unit" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claims 18 and 27 line 2 cites "the flow amount amplification changing unit". The examiner believes that it should be –the flow amount amplifying unit—because the changing unit does not have the claimed features.

Claim 23 recites the limitation "the pressurizing flow amount amplifying unit" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Please note the claims are replete with errors. Because of the length of the application and the number of claims, applicant is asked to review the application to ensure it is in proper form.

### ***Claim Rejections - 35 USC § 102***

7) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8) Claims 1, 7, 14-15, 23, 27-28, 51 and 53 are rejected under 35 U.S.C. 102(b) as being anticipated by Hashida (5911484).

In reference to claim 1, Hashida provides a brake fluid pressure control device for a vehicle comprising: a master cylinder (1) for generating a first brake fluid pressure according to a brake pedal operation; a wheel cylinder (2) to which a second brake fluid pressure is applied for brake control; a hydraulic booster for producing the second brake fluid pressure that is higher than the first brake fluid pressure; a main pipeline connecting the master cylinder to the wheel cylinder via the hydraulic booster; and

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a fluid pressure regulating unit (4, 6) disposed in the main pipeline between the master cylinder and the hydraulic booster, the fluid pressure regulating unit holding a pressure difference between a master cylinder side and a hydraulic booster side to a rated value (inherent to the type of arrangement); wherein the hydraulic booster has a pump unit (5) having intake and discharge ports, a flow amount amplifying unit (10), first and second pipelines to communicate with the main pipeline between the fluid pressure regulating unit and the wheel cylinder, respectively, and a flow amount amplification changing unit (18), the pump unit operative, always when the brake pedal is stepped on, to suck via the intake port brake fluid from the main pipeline between the master cylinder and the fluid pressure regulating unit and to compress and discharge via the discharge port the brake fluid to the second pipeline, the flow amount amplifying unit to which the brake fluid is discharged from the pump unit is supplied from the second pipeline and from which the brake fluid whose amount is larger than that supplied thereto is discharged to the first pipeline, and the flow amount amplification changing unit operative to select one of the first and second pipelines as a pressurizing path through which the brake fluid is discharged to the main pipeline between the fluid pressure regulating unit and the wheel cylinder for producing the second brake fluid pressure.

In reference to claim 7, Hashida provides a brake pressure control device wherein the flow amount amplification changing unit (18) selects the one of the first and second pipelines as the pressurizing path based on a difference between the first and second brake fluid pressures. Please note that valve 18 opens when the pump reaches a certain pressure.

In reference to claim 14, Hashida provides a brake pressure control device wherein the pressurizing flow amount amplifying unit comprises a first step piston whose one end on a brake fluid supply side is provided with a small pressure-receiving surface and whose the other end on a brake fluid discharge side is provided with a large pressure-receiving surface so that the amount of the brake fluid to be discharged is amplified by an area ratio of the large pressure-receiving surface to the small pressure-receiving surface, compared to that to be supplied. (Figure 1)

In reference to claim 15, Hashida provides a brake pressure control device wherein the pressurizing flow amount amplifying unit comprises a first step piston (11) whose one end is provided with a small diameter portion and whose other end is provided with a large diameter portion, a first guide wall on which the small diameter portion slides a first chamber surrounded by the first guide wall and a back surface of the small diameter portion, a second guide wall on which the large diameter portion slides, and a second chamber surrounded by the second guide wall and a front surface of the large diameter portion, wherein the brake fluid discharged from the pump unit is supplied to the first chamber, and the brake fluid amplified according to a stroke movement of the first step piston is discharged from second chamber to the first pipeline. (Figure 1)

In reference to claim 23, Hashida provides a brake pressure control device wherein the pressurizing flow amount amplifying unit comprises a third chamber (13) surrounded by a back surface of the large diameter portion and the second guide wall,

and the third chamber is connected to the main pipeline between the fluid pressure regulating unit and the master cylinder.

In reference to claim 27, Hashida provides a brake pressure control device wherein the flow amount amplification changing unit has a third chamber (13) surrounded by a back surface of the large diameter portion and the second guide wall, and the third chamber is provided with one of atmospheric pressure brake fluid.

In reference to claim 28, Hashida provides a brake pressure control device wherein the pressurizing flow amount amplifying unit is provided with a third pipeline connecting the second chamber to the main pipeline between the master cylinder and fluid pressure regulating unit; and a check valve (17) provided in the third pipeline for allowing brake fluid to flow only from the main pipeline to the second chamber.

In reference to claim 51, Hashida provides a brake pressure control device where the fluid pressure regulating unit (6, 4) is provided between the master cylinder and the discharge port of the pump.

In reference to claim 53, Hashida provides a brake pressure control device comprising: a pressure regulating reservoir (4) provided between the master cylinder and the intake port of the pump unit for restricting brake fluid pressure provided to the pump unit.

***Allowable Subject Matter***

9) Claims 17-18, 29, 47, and 48 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.



**Conclusion**

10) The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kushi et al, Leiber et al (4877296), Leiber et al (4846534), Matsuda, Burgdorf et al, Beck and Hashida (6312062 all provide brake systems with a pump and a boosting mechanism.

11) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Devon C Kramer whose telephone number is 703-305-0839. The examiner can normally be reached on Mon-Fri 8-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder can be reached on 703-308-3421. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1134.

DK

*Devon Kramer*  
8-18-03